

It is claimed:

1 1. A method of treating molten steel under vacuum
2 which comprises the steps of:

3 a) applying a degassing vacuum to molten steel; and
4 b) feeding pieces of a degasification-promoting solid
5 into the molten steel with a size of 2 to 50 mm at least in a
6 starting phase of the degasification.

1 2. The method defined in claim 1 wherein the
2 degasification solid is fed to the molten steel in the first 5
3 minutes of the degasification thereof.

1 3. The method defined in claim 2 wherein the
2 degasification solid is fed continuously at a feed rate of 20 to
3 100 kg/min while the molten steel is under a pressure < 2 mbar.

1 4. The method defined in claim 3 wherein the pieces of
2 the degasification-promoting solid are porous.

1 5. The method defined in claim 4 wherein the
2 degasification solid is a granulate.

1 6. The method defined in claim 4 wherein the
2 degasification solid is metal, ore or slag or a combination
3 thereof.

1 7. The method defined in claim 6 wherein the ore is
2 iron ore.

1 8. The method defined in claim 4 wherein the
2 degasification solid is stored in a vacuum bunker and is metered
3 into the molten steel.

1 9. The method defined in claim 8 wherein the
2 degasification solid is metered into the molten steel by a
3 vibrating trough or a cell wheel gate.

1 10. The method defined in claim 4 wherein, for a
2 circulating steel melt the solid is blown into the melt by
3 nozzles opening below the surface of the melt.

1 11. The method defined in claim 4 wherein, for a
2 circulating melt or a load stand degasification, the solid is
3 blown into the melt by lances extending into the melt.